Minutes of the Aboveground Storage Tank (AST) Enhanced Vapor Recovery (EVR) Workgroup Meeting on November 6, 2002

Meeting Place – Cal/EPA Headquarters Building in Sacramento, California.

Meeting Presentation – The Air Resources Board (ARB) staff's presentation summarized efforts to modify the AST certification procedures to include EVR requirements. This presentation can be viewed on ARB's vapor recovery website at http://www.arb.ca.gov/vapor/ast/ast.htm.

General Discussion of AST EVR Efforts

In 2002, several Workgroup meetings were conducted with a great deal of exchange between participants. Discussion topics included performance issues with existing AST systems, improvements to AST systems and components, federal, State, and local AST regulations / certifications, and correlation of AST operating parameters to ambient conditions.

Pressure monitoring was conducted on insulated ASTs with capacity ranging from 1,000 gallons to 6,000 gallons. Pressure monitoring was also conducted on a 1,000 gallon capacity single-wall steel AST. Monitoring data showed increased ullage pressures directly correlated to increased ambient temperatures. In some cases, monitoring data revealed system deficiencies which were later attributed to liquid blockage and leaking components.

ARB conducted Phase I and Phase II efficiency tests on a 1,000 gallon balance AST (insulated) and a 4,000 gallon single-wall AST with a central processor. A Phase II efficiency test was also conducted on a 10,000 gallon balance AST (insulated). In all cases, the overall efficiencies were greater than 95%. ARB staff plans to conduct more efficiency tests.

In December, 2001, ARB prepared a draft Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities using Aboveground Storage Tanks (CP-206). ARB staff has updated CP-206 that incorporated discussion items from the AST EVR Workgroup meetings in 2002.

Emergency Vent Conference Call

On September 26, 2002, a conference call was conducted with AST manufacturers, emergency vent manufacturers, rupture disk manufacturers, Underwriters Laboratory, and ARB to discuss:

- changes to the traditional style emergency vents that would improve their pressure integrity and;
- the technical and economic feasibility of using rupture disks as emergency venting devices.

Minutes of the conference call are posted on ARB's website at http://www.arb.ca.gov/vapor/ast/ast.htm.

A workgroup participant commented that it is not known at this time whether Underwriters Laboratories would approve of a low performance disk that has a rupture tolerance of ± 1.0 psig. If Underwriters Laboratories does not approve of a low performance disk, then a high performance disk would be required. High performance disks would be more expensive.

ARB staff agreed with the above comment. The general costs for both the high-quantity low performance disk and the low-quantity high performance disk are stated in the conference call minutes.

AST Inventory Update

ARB staff has taken several approaches to determine the number of gasoline ASTs in California, two of which included surveys to AST manufacturers and air districts. The AST numbers shown in the slide are not complete. ARB is currently conducting follow-up phone calls with AST manufacturers due to the lack of survey response. Most of the air districts with significant numbers of ASTs have been contacted. One comment from a tank manufacturer was that the number of agricultural ASTs appears to be very low.

At a recent meeting of the California Air Pollution Officers Association, there was a suggestion to contact the Certified Unified Program Agencies as a means to obtain a more accurate number of gasoline ASTs in California. ARB will follow-up with this suggestion.

One workgroup participant questioned why ARB is not regulating agricultural ASTs since these ASTs cause more emissions than insulated tanks. ARB replied that the decision to require vapor recovery control rests with local districts. Some air district rules require an ARB certified Phase I system on agricultural tanks. ARB also explained that the draft CP-206 incorporates standards and specifications for Phase 1 only systems. Most, if not all, air districts have permit exemptions for ASTs used in agricultural applications.

AST Monitoring Status

One comment on this slide was whether the 6,000 gallon balance AST was insulated. The 6,000 gallon balance AST being monitored is an insulated AST.

Workgroup Draft CP-206

ARB staff handed out a Workgroup Draft of CP-206. Staff pointed out that the document is a working draft and the EVR standards and specifications outlined in this draft may change, be deleted or new standards and specifications added. The

Workgroup was asked to provide comments to the draft CP-206 by December 31, 2002, so that ARB may summarize the comments for discussion at the next Workgroup meeting.

Development of Fugitive Emissions Test Procedure

Staff stated that a fugitive emission standard and test procedure would be developed for ASTs. The fugitive emission test procedure developed for USTs would be evaluated for AST applicability. ARB staff anticipates that the standard will based on a pound per day basis instead of a pounds per 1,000 gallon throughput as is the case for the UST EVR program. Inputs from the Workgroup would be sought during development of the standard and test procedure.

Upcoming Activities

ARB anticipates conducting fugitive emissions testing at sites located within the San Joaquin Valley Unified Air Pollution Control District and would like the Workgroup participants to identify potential AST sites. Testing would be conducted on a small capacity and large capacity ASTs.

Open Discussion

A comment was made that CAPCOA would like to see consistency in Phase I and Phase II configurations. Examples given were specifications for fill connections and allowable hose configurations. CAPCOA has requested ARB to develop Phase I and Phase II Summary Executive Orders that would outline these allowable configurations. ARB is aware of the issues that CAPCOA has presented (list of issues from the CAPCOA Vapor Recovery Technical Committee AGT Workshop February 16, 2000) and has begun addressing these issues in the Workgroup Draft of CP-206.

Proposed Next Workgroup Meeting

The next Workgroup meeting is proposed for the first week of February, 2003.

Presentation and Minutes of Past Workgroup Meetings– Presentations and minutes of previous workgroup meetings can be viewed on ARB's vapor recovery website at http://www.arb.ca.gov/vapor/ast/archive.htm#minutes.

Attendees:

Pat Bennett, ARB
Joe Guerrero, ARB
Cindy Castronovo, ARB
Ray Hernandez, ARB
Marilyn Sarantis, CIOMA
Sandra Duval, CIOMA
John Ekhtiar, Convault
Rich Erickson, Donlee Pump Company
Paul McWhorter, SAFE Trade Association / EcoVault / SPC Corp
John Merrill, Jensen Armor Systems
Lori Williams, Sierra Research
John Lewis, Utility Vault
Rich Stevens, Morrison Bros. Co.
Ronald Pilkington, Bay Area Air Quality Management District
John Marvin, Bay Area Air Quality Management District
Kevin Amick, Shields Harper & Co.

Via Teleconference:

Jim Swaney, San Joaquin Valley Unified APCD
John Schroeder, San Joaquin Valley Unified APCD
Brian Aunger, San Luis Obispo County APCD
Lou Roberto, South Coast AQMD
Teresa Sewell, Monterey Bay Unified APCD
Don Leininger, OPW
John David, Clay Bailey